Archeological Testing for Proposed Relocation of the Jack O'Lantern Branch Trail Booker T. Washington National Monument Franklin County, Virginia

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INTRODUCTION

Booker T. Washington National Monument (Figure 1) proposes to relocate the southern portion of the Jack O'Lantern Branch Trail away from the floodplain of Gills Creek. Two alternative routes are proposed: the first along an existing roadway and the second across undeveloped land some one hundred feet north of the existing trail.

The entire park is listed on the National Register of Historic Places. In accordance with the National Historic Preservation Act of 1966 (as amended) and the Programmatic Agreement between the NCSHPO=s, the Advisory Council for Historic Preservation, and the National Park Service (NPS), an archeological evaluation study was conducted to identify the potential impacts of this proposal. All phases of this project meet Secretary=s Standards for Historic Preservation Studies, and all associated personnel met Professional Qualifications Standards.

Archeological examination of the proposed routes was conducted by the author on September 8 and 9, 1999. The alternative using existing roadways will not require new ground disturbance and will have "no effect" on archeological resources. It will, however, route visitors near an existing historic stone foundation. Measuring approximately twelve feet square, this feature may date from the Burroughs' occupation of the site and should be scheduled for documentation and limited archeological investigation. The second alternative was evaluated by archeological excavation (Figure 2).

FIELD INVESTIGATIONS

Setting: The proposed southern alternative is located south of the Sparks Cemetery and traverses three landforms over its 700 feet length. The initial 200 feet (Tests 1 through 8) is located on slightly sloping terrain, punctuated by small erosion gullies. Multiple piles of field stone in the vicinity indicate the land's historic agricultural use. The middle portion of the trail (Tests 9 through 18) runs through a roughly flat, narrow (>100 feet) terrace. Field stone piles occur infrequently along this portion of the route. The final 300 feet (Tests 22 through 24) traverses highly eroded, relatively steep slopes with deep (>5 feet) erosion gullies. Field stone piles are clustered at the western terminus of this portion. The locations of all of the stone piles should be documented on the park's cultural resources base map at a future date.

Soils associated with these landforms are Clifford Fine Sandy Loam, 7 to 15 percent slopes for the initial 400 feet, and Clifford Fine Sandy Loam, 15 to 25 percent slopes for the final 300 feet. The Clifford series consists of very deep, well drained moderately permeable soils on ridges and side slopes of the Piedmont uplands. They are deep to saprolite and very deep to bedrock. They formed in residuum weathered from felsic crystalline rocks, such as mica schist, gneiss, granite gneiss, mica gneiss, granodiorite, and granite of the western Piedmont and Blue Ridge foothills.

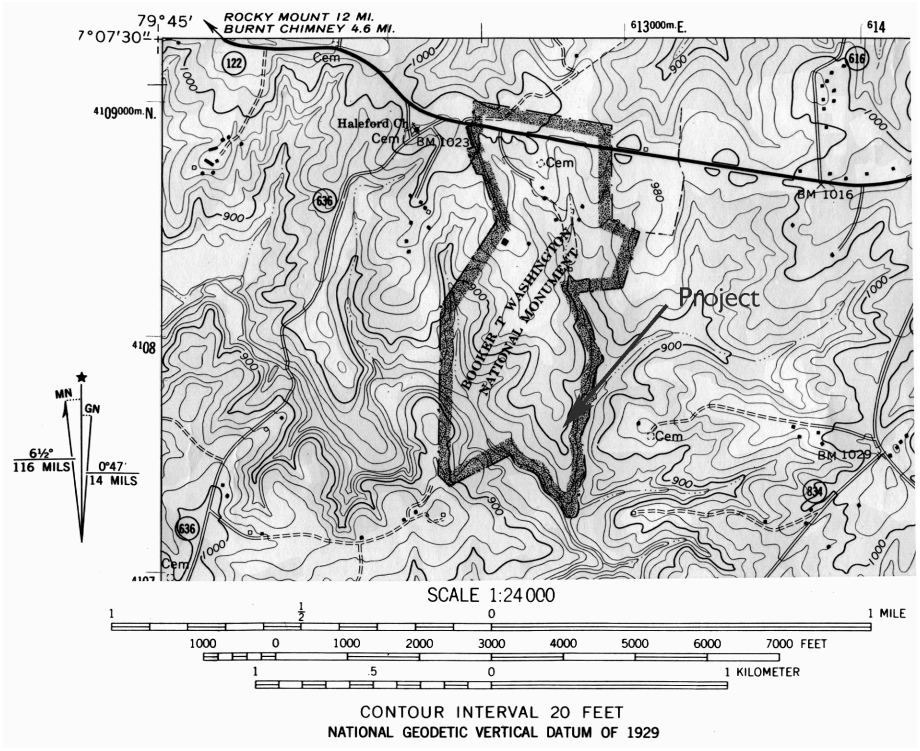

Figure 1: Project location.

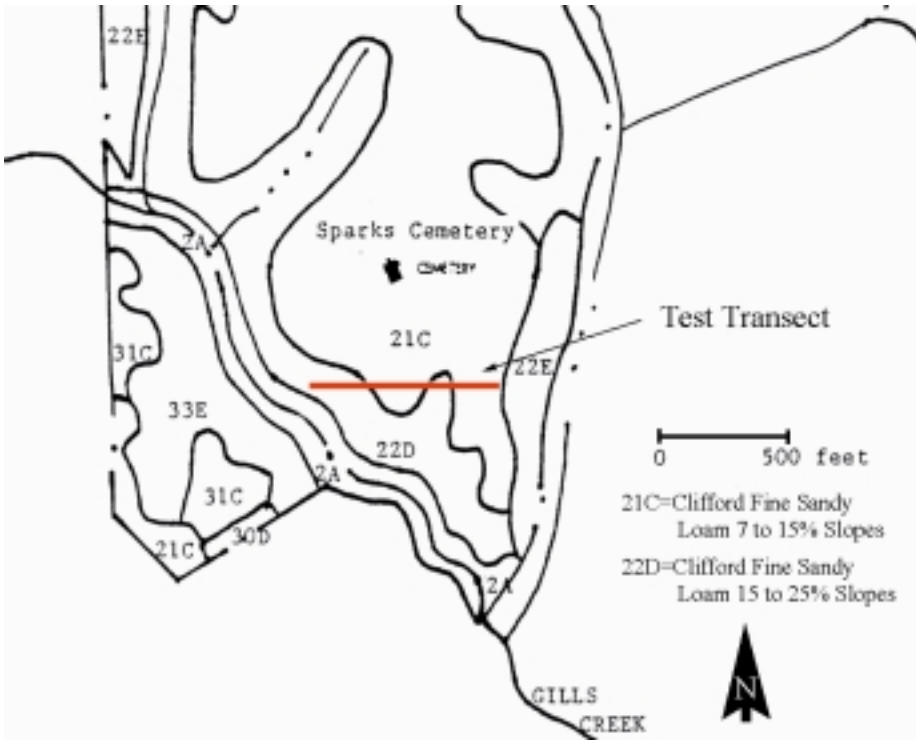

Figure 2: Location of archeological tests.

A typical pedon of Clifford loam in mixed hardwood and pine forest (Colors are for moist soil unless otherwise stated.):

Ap--0 to 5 inches; dark brown (7.5YR 3/3) fine sandy loam; weak fine granular structure; very friable, slightly sticky, slightly plastic; many fine, medium, and coarse roots; many fine tubular pores; 5 percent gravel; very strongly acid; clear wavy boundary.
BA--5 to 13 inches; yellowish red (5YR 4/6) loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; many fine, medium, and coarse roots; common fine tubular pores; very strongly acid; gradual wavy boundary.
Bt1--13 to 17 inches; 80 percent red (2.5YR 4/6) and 20 percent red (2.5YR4/8) clay loam; moderate medium and fine subangular blocky structure; friable, slightly sticky, slightly plastic; common fine, medium, and coarse roots; common fine tubular pores; common discontinuous faint clay films on faces of peds; very strongly acid; gradual wavy boundary.
Bt2--17 to 48 inches; red (2.5YR 4/8) clay; moderate medium subangular blocky structure; firm, sticky, slightly plastic; common fine, medium, and coarse roots; common fine tubluar pores; few discontinuous faint clay films on faces of peds; few fine flakes of mica; very strongly acid; gradual wavy boundary.
BC--48 to 58 inches; red (10R 4/6) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine, medium, and coarse roots; few fine tubular pores; few fine flakes of mica; very strongly acid; gradual wavy boundary.
C--58 to 72 inches; 80 percent red (2.5YR 5/8) and 20 percent reddish yellow (5YR 6/6) loam saprolite; massive; friable, few fine flakes of mica; very strongly acid.

Archeological Standards: All fieldwork and laboratory analysis was conducted in conformance with "Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines". All soils were passed through one-quarter inch hardware cloth with recovered artifacts placed in plastic bags by provenience. All excavation units and features were documented by photographs and measured drawings both in plan and in profile. Soil colors were recorded using the Munsell soil color system. All units were excavated to sterile soil excepting those tests which substantially exceed the anticipated depth of project construction. Archeological tests began 15 feet west of the existing trail and were excavated every 25 feet. Shovel tests averaged 1.25 feet diameter.

Archeological Tests (Figure 3):

Test 1: Located 15 feet west of existing trail. Four strata (Figure 4):
Stratum A: Surface to 0.2 feet below surface (fbs): Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.2 to 0.4 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.4 to 0.6 fbs: Brown (7.5YR 4/4) clay.
Stratum D: 0.6 to 1.0 fbs: Brown (7.5YR 4/4) dense clay with mica flecks.

Test 2: Located 25 feet west of Test 1 in a shallow erosion gully. Three strata:
Stratum A: Surface to 0.1 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.25 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.25 to 0.45 fbs: Brown (7.5YR 4/4) dense clay with mica flecks.

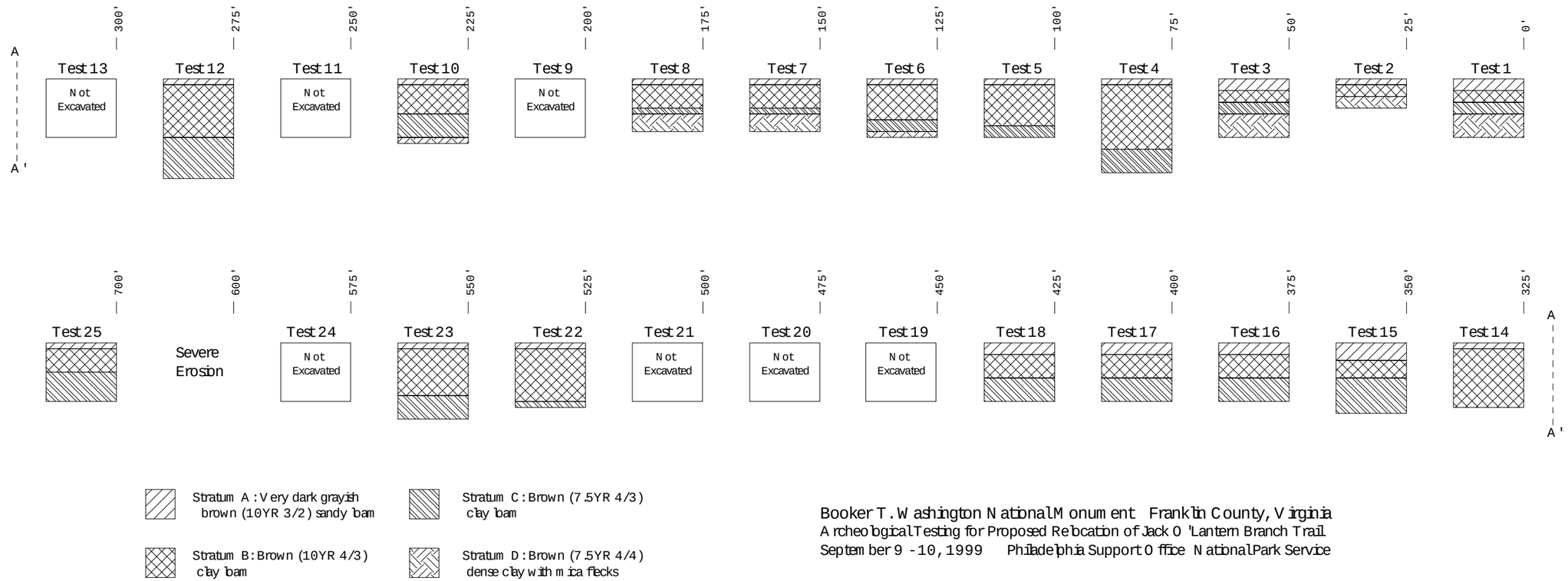

Figure 3: Profiles of archeological tests.

Test 3: Located 50 feet west of Test 1 in a shallow erosion gully. Four strata:
Stratum A: Surface to 0.2 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.2 to 0.4 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.4 to 0.6 fbs: Brown (7.5YR 4/4) clay.
Stratum D: 0.6 to 1.0 fbs: Brown (7.5YR 4/4) dense clay with mica flecks

Test 4: Located 75 feet west of Test 1, and 12 feet north of a field stone pile. Three strata:
Stratum A: Surface to 0.1 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 1.2 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 1.2 to 1.6+ fbs: Brown (7.5YR 4/4) clay.

Test 5: Located 100 feet west of Test 1. Three strata (suspended at dense roots):
Stratum A: Surface to 0.1 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.8 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.8 to 1.0+ fbs: Brown (7.5YR 4/4) clay.

Test 6: Located 125 feet west of Test 1. Four strata:
Stratum A: Surface to 01 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.7 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.7 to 0.9 fbs: Brown (7.5YR 4/4) clay.
Stratum D: 0.9 to 1.0 fbs: Brown (7.5YR 4/4) dense clay with mica flecks

Test 7: Located 150 feet west of Test 1. Four strata:
Stratum A: Surface to 01 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.45 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.45 to 0.6 fbs: Brown (7.5YR 4/4) clay.
Stratum D: 0.6 to 0.9 fbs: Brown (7.5YR 4/4) dense clay with mica flecks

Test 8: Located 175 feet west of Test 1. Four strata:
Stratum A: Surface to 01 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.45 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.45 to 0.6 fbs: Brown (7.5YR 4/4) clay.
Stratum D: 0.6 to 0.9 fbs: Brown (7.5YR 4/4) dense clay with mica flecks

Test 9 was to be located at 200 feet west of Test 1. It fell into a deep erosion gully and so was not excavated.

Test 10: Located 225 feet west of Test 1. It lay in a small island of uneroded soils between two erosion gullies. Four strata:

Stratum A: Surface to 01 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.55 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.55 to 0.95 fbs: Brown (7.5YR 4/4) clay.
Stratum D: 0.95 to 1.1 fbs: Brown (7.5YR 4/4) dense clay with mica flecks

Test 11 was to be located at 250 feet west of Test 1. It fell into a deep erosion gully and so was not excavated.

Test 12: Located 275 feet west of Test 1 and 25 feet south of a field stone pile. Three strata:
Stratum A: Surface to 01 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 1.0 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 1.0 to 1.7 fbs: Brown (7.5YR 4/4) clay.

Test 13 was to be located 300 feet west of Test 1. It fell in the center of a small field stone pile and was not excavated.

Test 14 was located 325 feet west of Test 1. Two strata:
Stratum A: Surface to 01 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 1.1 fbs: Brown (10YR 4/3) clay loam with interbedded stones.

Test 15: Located 350 feet west of Test 1. Three strata:
Stratum A: Surface to 0.3 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.3 to 0.6 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.6 to 1.2 fbs: Brown (7.5YR 4/4) clay.

Test 16: Located 375 feet west of Test 1. Three strata:
Stratum A: Surface to 0.15 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.15 to 0.6 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.6 to 1.0 fbs: Brown (7.5YR 4/4) clay becoming increasingly dense.

Test 17: Located 400 feet west of Test 1. Three strata:
Stratum A: Surface to 0.15 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.15 to 0.6 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.6 to 1.0 fbs: Brown (7.5YR 4/4) clay becoming increasingly dense.

Test 18 was located 425 feet west of Test 1, and less than 10 feet east of the edge of the level plateau that began around Test 12. Three strata:

Stratum A: Surface to 0.15 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.15 to 0.6 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.6 to 1.0 fbs: Brown (7.5YR 4/4) clay becoming increasingly dense.

Test 19 was to be located at 450 feet west of Test 1. It lay at the very edge of an erosion gully surrounded by large tulip trees; it was not excavated due to these disturbances.

Test 20 was to be located at 475 feet west of Test 1 but fell into a deep erosion gully and was not excavated. Test 21 was to be located at 500 feet west of Test 1 but fell into a deep erosion gully and was not excavated.

Test 22 is located 525 feet west of Test 1, adjacent to a deep erosion gully. Three strata:

Stratum A: Surface to 0.1 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 1.0 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 1.0 to 1.1 fbs: Brown (7.5YR 4/4) clay becoming increasingly dense.

Test 23 is located 550 feet west of Test 1. Three strata:

Stratum A: Surface to 0.1 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.9 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.9 to 1.3 fbs: Brown (7.5YR 4/4) clay becoming increasingly dense.

Test 24 was located on the margin of an extensive complex of deep erosion gullies on slopes approaching 20%. This area was excluded from testing.

Test 25 is located 700 feet west of Test 1. Three strata:

Stratum A: Surface to 0.1 fbs: Very dark grayish brown (10YR 3/2) organic sandy loam with humus and roots.
Stratum B: 0.1 to 0.5 fbs: Brown (10YR 4/3) clay loam.
Stratum C: 0.5to 1.0 fbs: Brown (7.5YR 4/4) clay becoming increasingly dense.

CONCLUSION

The results of the archeological testing indicated that soil profiles were consistent with the anticipated, culturally unmodified soil description. Areas containing field stone piles tended to possess slightly thicker topsoil than other areas, indicating their historic use as agricultural fields. Soils in the western portion of the proposed trail route were highly eroded, which may have occurred after the historic Burroughs occupation as evidenced by the multiple field stone piles in that area. No artifacts were recovered. The proposed southern trail route will have "no effect" on archeological resources.

ACKNOWLEDGEMENTS

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